

SAFETY AND EFFICACY OF SOFOSBUVIR/VELPATASVIR IN PEDIATRIC PATIENTS 6 TO < 18 YEARS OLD WITH CHRONIC HEPATITIS C INFECTION

Dr. Maureen M. Jonas¹, Dr. Rene Romero², Dr. Etienne M. Sokal³, Dr. Philip Rosenthal⁴, Gabriella Verucchi⁵, Chuan-Hao Lin⁶, Jessica W. Wen⁷, Michael R Narkewicz⁸, Sanjay Bansal⁹, Jiang Shao¹⁰, Chiahsiang Hsueh¹⁰, Anuj Gaggar¹⁰, Kathryn Kersey¹¹, Regino P Gonzalez-Peralta¹², Daniel H. Leung¹³, Dr. William Balistreri¹⁴, Karen F Murray¹⁵ and Kathleen B Schwarz¹⁶,
(1)Division of Gastroenterology, Hepatology and Nutrition, Boston Children's Hospital, Boston, MA, (2)Children's Healthcare of Atlanta, Atlanta, GA, USA, (3)Cliniques Universitaires Saint-Luc, Université Catholique De Louvain, Brussels, Belgium, (4)Department of Pediatrics, University of California San Francisco, San Francisco, CA, (5)Azienda Ospedaliero-Universitaria Di Bologna - Policlinico S.Orsola-Malpighi, Bologna, Italy, (6)Children's Hospital Los Angeles, Los Angeles, CA, (7)The Children's Hospital of Philadelphia, Philadelphia, PA, (8)University of Colorado School of Medicine and Children's Hospital Colorado, Aurora, CO, (9)King's College Hospital, London, United Kingdom, (10)Gilead Sciences Inc., Foster City, CA, (11)Gilead Sciences, Inc., Foster City, CA, (12)Pediatric Gastroenterology, Hepatology and Liver Transplant, Advent Health for Children, Orlando, FL, (13)Baylor College of Medicine and Texas Children's Hospital, Houston, TX, (14)Cincinnati Children's Hospital Medical Center, Cincinnati, OH, (15)University of Washington School of Medicine and Seattle Children's Hospital, Seattle, WA, (16)Johns Hopkins University School of Medicine, Baltimore, MD

Abstract Text

Background: Direct acting antiviral (DAA) regimens have been approved for the treatment of HCV in adolescents aged 12 to <18 years, but for younger children, the standard of care is still pegylated-interferon plus ribavirin for up to 48 weeks. The current study evaluated the safety and efficacy of an all-oral DAA treatment with the pangenotypic regimen of sofosbuvir (SOF)/velpatasvir (VEL) in children 6 to <18 years old.

Methods: Patients aged 6 to <18 years old with chronic HCV of any genotype were enrolled into this open-label, ongoing study to receive the fixed dose combination SOF/VEL. Patients 6 to <12 years old received SOF/VEL 200 mg/50 mg and 12 to <18 years old received SOF/VEL 400mg/100mg once daily for 12 weeks. The key efficacy endpoint was SVR12. Safety was assessed by adverse events (AEs) and clinical/laboratory data. Intensive pharmacokinetic (PK) sampling on Day 7 in a subgroup of patients (N=17) of each age group was done to confirm the appropriateness of the chosen dose.

Results: A total of 102 patients 12 to <18 years old and 73 patients 6 to <12 years were enrolled and treated. The genotype distribution overall was 75% GT1, 5% GT2, 13% GT3, 3% GT4, 3% GT6; 51% were female, 80% white, 85% treatment naïve, and 91% vertically infected. Intensive PK confirmed that the doses selected were appropriate. The SVR12 rate among patients 12 to <18 years old was 95% (97 of 102) and among the 6 to <12 years old was 92% (67 of 73); one patient in each age group had virologic failure and the remaining 9 patients did not achieve SVR for non-virologic reasons such as lost to follow-up. Most AEs were mild or moderate in severity. In total, 5 subjects had a serious AE, none of which was attributed to treatment. Two patients discontinued treatment due to AEs; neither AE was considered treatment related. The most common AEs (>15% of patients) were headache, fatigue, and nausea in adolescents and vomiting, cough and headache in 6 to <12 years olds.

Conclusion: In patients 6 to <18 years old with chronic GT1, 2, 3, 4 or 6 HCV infection, treatment with SOF/VEL for 12 weeks resulted in ≥92% SVR12 rate. This pangenotypic regimen was well tolerated overall, supporting its potential as a treatment option for children 6 to 17 years of age. The study is ongoing in children aged 3 to <6 years old.

Disclosures

Maureen M. Jonas – AbbVie: Grant/Research Support; BMS: Grant/Research Support; Echosens: Grant/Research Support; Merck: Grant/Research Support; Roche: Grant/Research Support; Gilead: Grant/Research Support; Gilead: Consulting

Rene Romero – Gilead, Merck: Grant/Research Support

Philip Rosenthal – Gilead: Advisory Committee or Review Panel; AbbVie: Grant/Research Support; Merck: Grant/Research Support; Roche: Grant/Research Support; Retrophin: Consulting; Retrophin: Grant/Research Support; Albireo: Grant/Research Support; Albireo: Consulting; Audentes: Consulting; Mirum: Grant/Research Support; Gilead: Grant/Research Support

Gabriella Verucchi – Gilead: Speaking and Teaching; Gilead: Grant/Research Support; AbbVie: Speaking and Teaching; abbvie: Advisory Committee or Review Panel

Jessica W. Wen – Gilead: Consulting; Gilead: Grant/Research Support; AbbVie: Grant/Research Support; Alexion: Grant/Research Support

Michael R Narkewicz – Vertex: Consulting; AbbVie: Grant/Research Support; Gilead: Grant/Research Support

Chiahsiang Hsueh – Gilead Science, Inc: Employment

Anuj Gaggar – Gilead Sciences, Inc.: Employment

Kathryn Kersey – Gilead: Stock Shareholder; Gilead: Employment

Regino P Gonzalez-Peralta – Gilead: Advisory Committee or Review Panel; Kadmon: Advisory Committee or Review Panel; Gilead: Grant/Research Support; Alexion: Advisory Committee or Review Panel; AbbVie: Grant/Research Support; Roche: Advisory Committee or Review Panel; Merck: Grant/Research Support

Daniel H. Leung – AbbVie: Grant/Research Support; BMS: Grant/Research Support; Gilead: Grant/Research Support; Roche: Grant/Research Support; Merck: Consulting

William Balistreri – MERCK: Grant/Research Support; ALEXION: Advisory Committee or Review Panel; OTSUKA: Advisory Committee or Review Panel; ABBVIE: Grant/Research Support; GILEAD: Grant/Research Support

Kathleen B Schwarz – Gilead: Grant/Research Support; BMS: Grant/Research Support; Roche/Genentech: Grant/Research Support; Up to Date: Consulting
The following people have nothing to disclose: Etienne M. Sokal, Chuan-Hao Lin, Sanjay Bansal
Disclosure information not available at the time of publication: Jiang Shao, Karen F Murray